

REMARKS

According to the May 12, 2005 Office Action, claims 1-28 and 30-38 are pending in the application. These same claims have been rejected. Specifically, claim 1-28 and 30-38 have been rejected under 35 U.S.C. § 112, ¶ 1 as not enabling, under 35 U.S.C. § 112, ¶ 2 as indefinite, and under 35 U.S.C. § 102(a) as anticipated by Girardot, Marc and Sundaresan, Neel, "Millau: an Encoding format for efficient representation and exchange of XML over the Web," Computer Networks 33 (2000) 747-765 (Girardot et al.).

In response to the Examiner's remarks, Applicants have amended independent claims 1, 12, 16, 20, 23, 27, and 38. Applicants would like to thank the Examiner for the insightful remarks regarding the pending claims, thereby assisting the Applicants in placing the claims in better condition for allowance. Applicants address the Examiner's remarks in the order presented in the Office Action.

Rejection of claims 1-28 and 30-38 under 35 U.S.C. § 112, ¶ 1

Applicants have canceled the limitation "binary format allows for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream," thereby addressing the Examiner's concern that "there is no description in the instant specification that teach[es] how the binary format of the claimed invention is able to allow for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream" (Office Action, p. 3). Although Applicants disagree that this limitation is not enabling, since it has been canceled this is a moot point that does not need to be addressed presently.

Rejection of claims 1-28 and 30-38 under 35 U.S.C. § 112, ¶ 2

Likewise by canceling the limitation "binary format allows for incremental output and parsing of the data stream without forcing the creation of tables at the beginning of the stream," Applicants have addressed the Examiner's concern that claims 1-28 and 30-38 are "incomplete for omitting essential elements...the omitted elements [being] ... how the binary format allows for incremental output and parsing of the data stream without forcing the creation of table at the beginning of the stream" (Office Action, p. 3). Again, Applicants do

not share in the Examiner's interpretation of these claims, but since the aforementioned limitation was canceled, this rejection under 35 U.S.C. § 112, ¶ 2 is moot and does not need to be addressed presently.

Rejection of claims 1-28 and 30-38 under 35 U.S.C. § 101

The Examiner observes that claims 1-28 and 30-38 are rejected under § 101 "because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101" (Office Action, p. 4). Although the Examiner does not point to any specific limitations within these claims, based on the discussion in the paragraph previous to the Examiner's observation, Applicants take it the Examiner is referring to the limitation of "binary format allows for incremental output and parsing of the data stream without forcing the creation of table sat the beginning of the stream" (Office Action, p. 3). In that case, this limitation has been canceled and the Examiner's objection is moot.

Rejection of claims 1-28 and 30-38 under 35 U.S.C. § 102(a)

As mentioned above, the following are the independent claims presently pending in the application: 1, 12, 16, 20, 23, 27, and 38. For example, claim 1 recites:

A method for generating a data stream according to a binary format of a tag-based description language, comprising:

tokenizing tag names into numeric tokens for use in the data stream, wherein the numeric tokens are in incrementally consumable form.

(emphasis added). In relevant part, amended claim 1 recites that "the numeric tokens are in incrementally consumable form." Exactly *how* this is accomplished is explained in the Specification as follows:

The most significant bit has special meaning depending on the type of the token... Variable sized unsigned integer values are represented by a multi-byte encoding format. This consists of a series of bytes where the most significant bit is a continuation flag.

(p. 16, l. 21 – p. 17, l. 4). Thus, multi-byte tokens can exist, and the fact that they have continuation flags, allows them to be later broken apart into manageable pieces if the need to do so arises. The following passage further explains why this is so:

XML tokens such as XMLTOK_ATTRIB and XMLTOK_PCDATA can be arbitrarily large [i.e., multi-byte], since maxlen is approximately 4 Gigabytes. Therefore, an XML consumer should be prepared to consume such tokens incrementally by breaking up a long token into manageable pieces.

This exemplary implementation operates with both an input buffer holding tokenized XML as well as an output buffer for the textual XML and both buffers impose size limitations that are addressed by processing the first 1000 bytes of attribute and pcddata tokens, holding variable-length datatypes, such as strings, and leaving the rest for later processing once the buffers become available again.

(Specification, p. 31, ll. 2-10). Thus, the fact that tokens can have continuation flags allows them on the receiving end to be broken into manageable pieces to be consumed incrementally. In short, in this aspect, the numeric tokens are in incrementally consumable form.

Claims 12, 16, 23, 27, and 38 recite similar limitations: “wherein the numeric tokens are in incrementally consumable form” (claim 12); “wherein the numeric tokens are in incrementally consumable form” (claim 16); “wherein the numeric tokens are in incrementally consumable form” (claim 27); and “wherein the numeric tokens are in incrementally consumable form” (claim 38).

Claim 20 differs slightly from these aforementioned claims in that it recites “wherein the document is consumed incrementally.” Again, invoking the above cited passage:

XML tokens such as XMLTOK_ATTRIB and XMLTOK_PCDATA can be arbitrarily large [i.e., multi-byte], since maxlen is approximately 4 Gigabytes. Therefore, an XML consumer should be prepared to consume such tokens incrementally by breaking up a long token into manageable pieces.

This exemplary implementation operates with both an input buffer holding tokenized XML as well as an output buffer for the textual XML and both buffers impose size limitations that are addressed by processing the first 1000 bytes of attribute and pcddata tokens, holding variable-length datatypes, such as strings, and leaving the rest for later processing once the buffers become available again.

(Specification, p. 31, ll. 2-10). Thus, per the description above, tokens are consumed incrementally by breaking up a long token into manageable pieces. The way this is accomplished is by having both an input buffer to hold the tokenized XML as well as an output buffer for textual XML. Moreover, both of these buffers impose size limitations on the amount of information that is processed – in one aspect, processing the first 1000 bytes

(but clearly, other processing limits could be employed as would be appreciated by those skilled in the art – depending on the needs and resources of any given system).

Applicants contend that the aforementioned limitations introduced by way of amendment into claims 1, 12, 16, 20, 23, 27, and 38 are missing from Girardot et al. Applicants note that "a claim is anticipated only if *each and every* element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987) (emphasis added). *See Also* MPEP § 2131. Girardot et al. merely talks about tokenizing and parsing in general terms, but not in such a way that "the numeric tokens are in incrementally consumable form" (claims 1, 12, 16, 23, 27, and 38) or "the document is consumed incrementally" (claim 20), respectively. For example, Girardot et al. discloses that the "*Millau* SAX parser creates LIFO ... stack in which it puts the name of the element that are opened and not yet closed....Then it reads tokens from the input stream until the stack is empty" (pp. 751-752). But this does not teach that "the numeric tokens are in incrementally consumable form" so that they can be introduced in "manageable pieces" to the *Millau* parser, or for that matter, that the parser "consum[es] incrementally." Thus, Applicants submit that claims 1, 12, 16, 20, 23, 27, and 38 patentably define over Girardot et al.

As mentioned, claims 1, 12, 16, 20, 23, 27, and 38 are the independent claims. Claims 2-11, 13-15, 17-19, 21-22, 24-26 and 28 and 30-37 depend either directly or indirectly from claims 1, 12, 16, 20, 23, 27, and 38, respectively, and are believed allowable for the same reasons. Withdrawal of the rejection and allowability of the pending claims is thus earnestly solicited.

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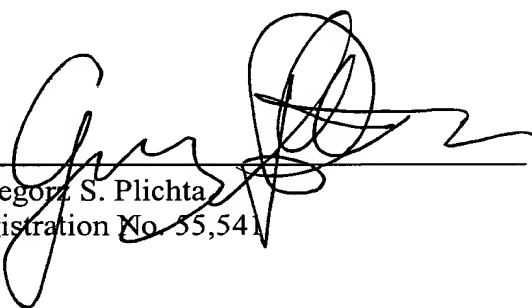
PATENT
REPLY FILED UNDER EXPEDITED
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37 CFR § 1.116

CONCLUSION

Applicants believe that the present Amendment is responsive to each of the points raised by the Examiner in the Office Action, and submit that Claims 1-28 and 30-38 of the Application are in condition for allowance. Favorable consideration and passage to issue of the application at the Examiner's earliest convenience is earnestly solicited.

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